Creating Vegetative Designs

VegSpec

About Vegspec

Vegspec is a web-based decision support system that assists land managers in the planning and design of vegetative establishment practices.

VegSpec utilizes soil, plant, and climate data to select plant species that are (1) site-specifically adapted, (2) suitable for the selected practice, and (3) appropriate for the purposes and objectives for which the planting is intended.

The VegSpec application has the ability to determine site-specific adaptability of plant species.

VegSpec 3.0 Requirements:

VegSpec design module requires Java enabled Netscape 4.06, or Internet Explorer 4.0, or higher.

Go to the Netscape or Internet Explorer home sites for the latest downloadable browser versions. **http://www.microsoft.com/** or **http://www.microsoft.com/**

Starting VegSpec

Open the Plants home page in an internet browser at
http://plants.usda.gov/
Click on the VegSpec icon to go to the home page.

Click on icon to go to the VegSpec home page and application.

You can start the Vegspec application from the home page, as well as select other related topics.

Click on the Vegspec image or click **Starting Vegspec**
on the top menu bar to start the application.
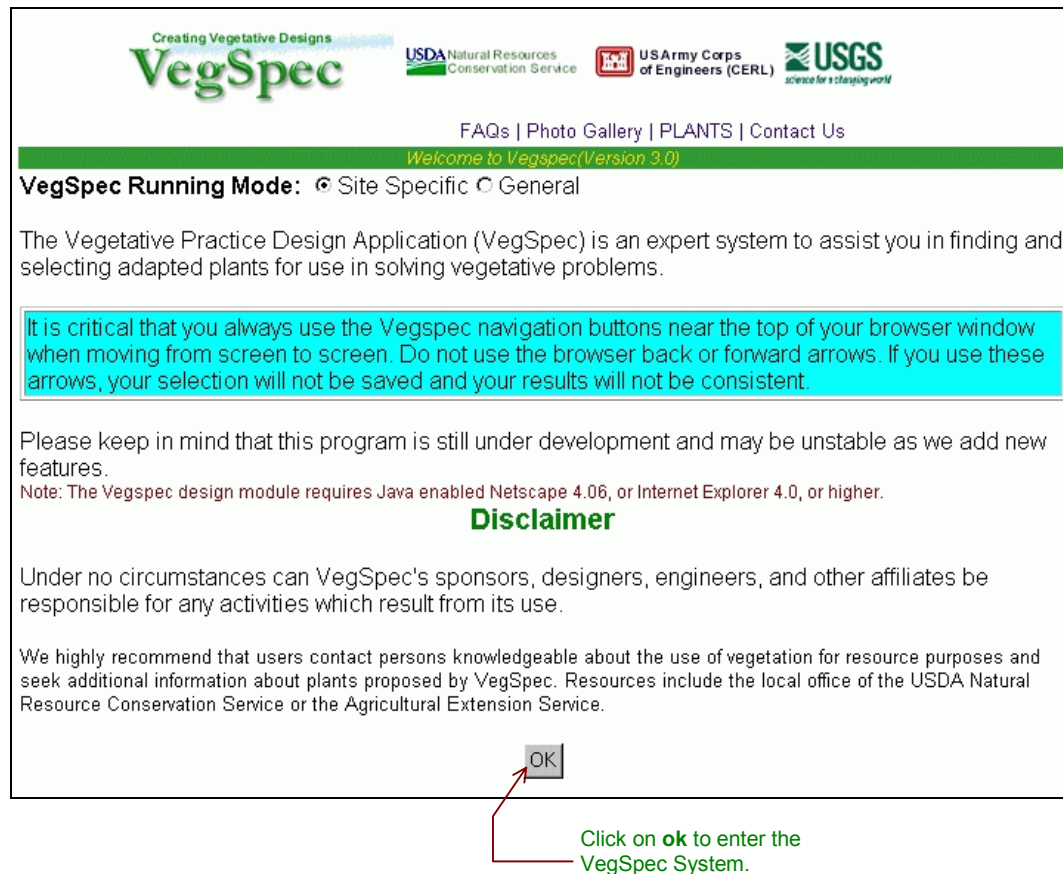
The following subtopic links are located above the top menu bar:

- *FAQs* – frequently asked questions
- *Photo Gallery* – online photo gallery
- *PLANTS* – Plants database
- *Contact Us* – displays an e-mail window for your comments
- *Help* – online help system – TOC and contact-sensitive

The following links are located on the top menu bar:

- *About Vegspec* – Describes the Vegspec system
- *Starting Vegspec* – starts the VegSpec application
- *Related Sites* – links to other plant-based websites
- *Vegspec Team* – links to sponsors and developers

After starting Vegspec, the following Disclaimer screen is displayed. Click on the site-specific or general option and read the disclaimer text. Click on **ok** to begin.

Click on **ok** to enter the
VegSpec System.

Site Specific vs. General approach:

Vegspec now has a general or a site-specific option to choose before starting your practice designs.

Select the **Site Specific** option to narrow down plant choices by state, mlra, soil, and climate options. This is the recommended method as the vegetative list is more user-specific and regionally accurate.

Users may select the **General** option for a generalized plant list. You **must** select a Plant Adaptation Zone under the Soil Attributes Suboption to even get close to an appropriate list of plants. *Note:* The Planting Design section is not available in this option.

Do not use the browser back and forward buttons to navigate, as screen choices might be lost.

Site Description

Site Description is the first section of the VegSpec application. If you have selected the recommended site-specific approach, you must enter your state, soils, and climate information before continuing to another section. If this section is not fully completed, warnings are displayed.

If you have selected the general approach, this section does not have to be filled out completely before selecting a different section. The Planting Design section is not available, and your plants list can be longer.

Objectives

The Objectives section allows you to select applicable vegetative practice and purposes for your site. It is important to select a vegetative practice, as this helps narrow your plants list considerably.

Select one of the eight vegetative practices or objectives. This defines your site requirements and targets plants that are applicable.

After selecting a practice, a list of purposes is displayed. Optionally, select one or more purposes and click on **Accept Purpose**, to display a list of subpurposes. You may select other options such as plant characteristics. Additional selections refine your plants list for your site specific objectives.

Select Plants

The Select Plants section is where you select applicable plants from a Potential Plants list. The plants listed are based on the vegetative choices you have designated.

Click on applicable plants for your site. Ctrl+click for multiple plants.

Click on arrows to select plants and move them between Potential Plants and User Selected Plants.

Plant Attributes

Click Attributes on the Select Plants page to screen potential plants for selected attributes. The Attributes button on several other screens presents attributes for selected plants only.

Planting Design

The Planting Design is available for vegetative calculation and plant design specifications if you have selected the site-specific approach. **This section is only available if you have selected the site-specific approach.**

The load time for this Java program can take 1-5 minutes, depending on internet traffic and connection speed.

There are eight tabular vegetative choices:
- *Plant Material*
- *Seeding Calculation*
- *Pure Planting*
- *Mixed Planting*
- *Sod/Sprig Planting*
- *Windbreak*
- *Site Specification*
- *Planting Specification*

Plant Material

Depending on your vegetative choices, you will have applicable plant material options such as container, bareroot, or seed.

Select a plant material for each plant species from the drop-down fields.

Seeding Calculation

Determine your total needs for how many seeds per acre your vegetative site will need. You can mix percentages for different compatible plants, but the mix % should total 100% for accurate calculations.

The example below is using Drill as the Seeding Method.

1. Enter the number of Acres to Seed and tab.

2. Choose either Drill or Broadcast. If Drill, enter spacing in inches.

3. Enter the Mix % and tab. The remaining fields are populated.

Evaluate planting design

Click the Evaluate button available on several planting screens to view planting concerns.

View attributes for listed plants only.

Planting Calculation

Depending on whether you are performing Mixed or Pure Planting, you can determine the rate/acre total number of plants needed between and/or within the rows.

(Note: Example below shows steps for mixed planting with different row spacing.)

1. Enter the total acres to plant and tab.

2. Enter the Between Row Spacing.

3. Enter the User entered Rate/Acre

Windbreak

Determine the total plants needed for your user-specified windbreak design.

1. Enter windbreak length and tab.

2. Select plant from drop-down field.

3. Enter Plant Plan and a total is calculated for you.

4. Select Add Row to add another plant.

Sprig

Sod/Sprig Planting allows you to designate the preferred units and units per acre. Application calculates Total Units after you enter Acres to Plant, Units, and Units/Acre.

Site Specification

Site Specification is where you can designate seedbed preparation methods and temporary cover.

Planting Specification

Planting Specification allows you to determine any special planting material treatments.

Click on Additional Planting Specification and a dialog box appears where you can designate different planting treatments.

Reports

VegSpec reports are a product of your vegetative practice options and are customized by you. Your report displays your vegetative options with data tables, site specification tips, and planting calculations.